Semester	4				
Course Code	ENCM 22791				
Course Name	Scientific Communication				
Credit Value	1				
Status	Compulsory				
Pre-requisite	None				
Co-requisite	None				
Hourly breakdown	Theory	Practical	Independent Learning		
	12	9	29		

## **Intended Learning Outcomes:**

After completion of this course unit, the student will be able to:

- 1. explain the goals of scientific communication,
- 2. demonstrate skills in locating scientific literature
- 3. demonstrate competencies in scientific document writing (literature review, project proposal, project report, etc.) including style, sentence construction, citing and listing references using an appropriate reference generator, avoiding plagiarism
- 4. demonstrate skills in conducting surveys and case studies, and
- 5. communicate scientific information using professional written and verbal formats.

### **Course Content:**

Scientific communication; introduction and goals. Identification of environmental issues in formulating a case study, postulating hypotheses, and setting objectives. Locating scientific literature (PubMed, ScienceDirect, Scopus and Researchgate, Mendeley with e library) and writing a literature review. Reference styles and reference generator (Mendeley with e-library, Word plugin, Plagiarism. Writing a project proposal. Surveys and case studies in pure and applied sciences. Factors to be considered at the planning stage of a case study. Questionnaire design: open ended questions, structured and semi structured questions, scale questions, and Focus group interviews. Writing a group project report. Writing an abstract, poster preparation. An effective oral presentation.

Practical sessions on literature search and reference generation, Design a questionnaire for a given case, writing an abstract, and effective presentation.

#### **Teaching/ Learning Methods:**

A combination of lectures, computer aided practical sessions, assignments

## Assessment Strategy:

Continuous assessment and end of semester examination. Percentage given for each subcomponent indicates the percent contribution to the final marks.

Continuous Assessment		Fin	Final Assessment		
60 %			40 %		
Details:		Theory	Practical	Other	
Assignments	50		-	40	
Quizzes	10			Report	
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# **Recommended Readings:**

- 1. Matthews JR, Matthews RW (2014) Successful Scientific Writing. A Step-By-Step Guide for the Biological and Medical Sciences. 4th ed. Cambridge University Press SBN-13: 978-1107691933 ISBN-10: 1107691931.
- 2. Morgan SE, Reichert T, & Harrison, TR, (2001) From Numbers to Words: Reporting Statistical Results for the Social Sciences. Pearson ISBN-10: 080133280X | ISBN-13: 978-0801332807.